

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P959466

Luminaire Tested: **NAV-SB1A-835-U-5MQ**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P959466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-835-U-5MQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: -

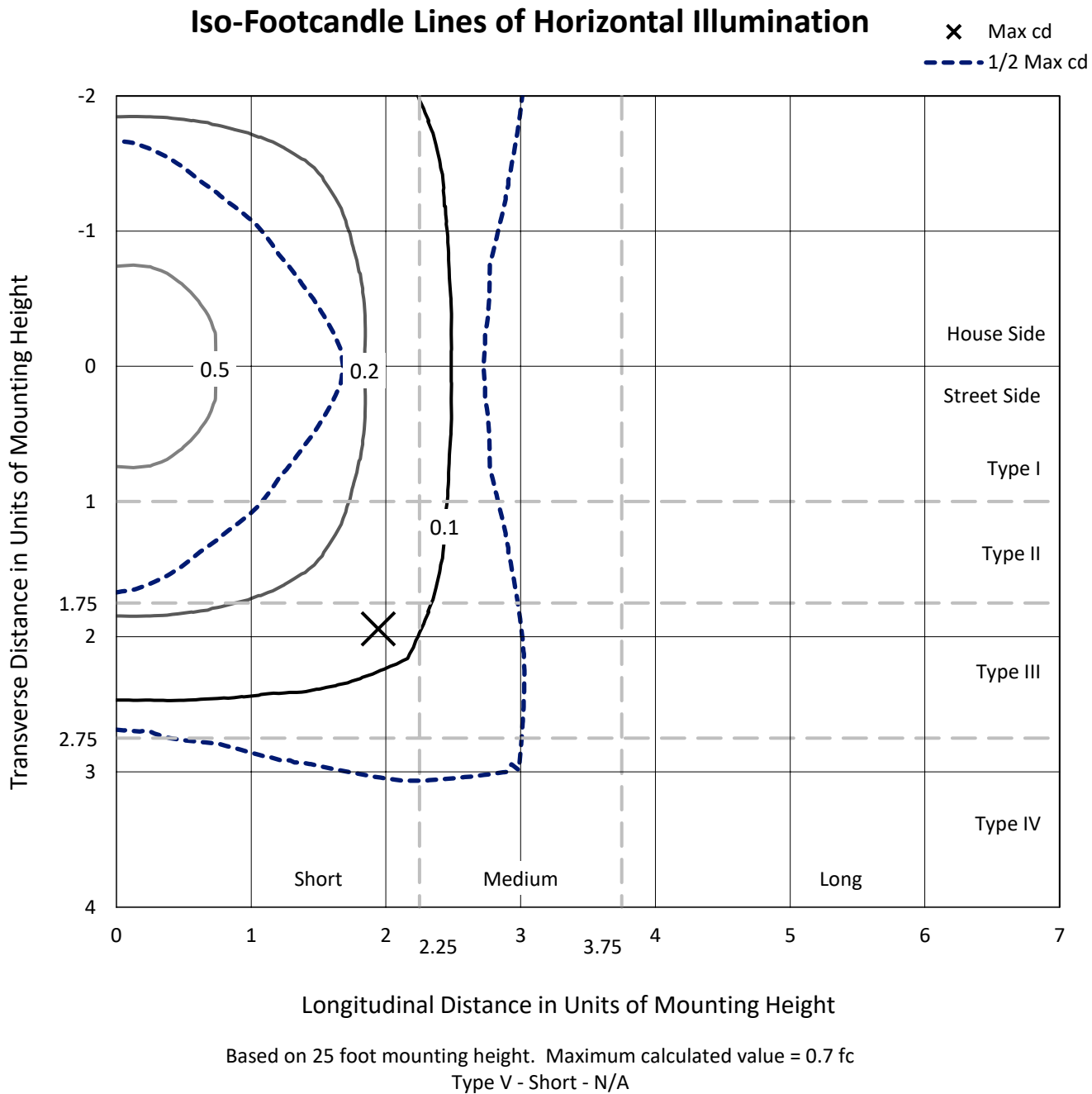
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 4467.9 lumens  
Efficiency: N/A  
Efficacy: 144.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G1

Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

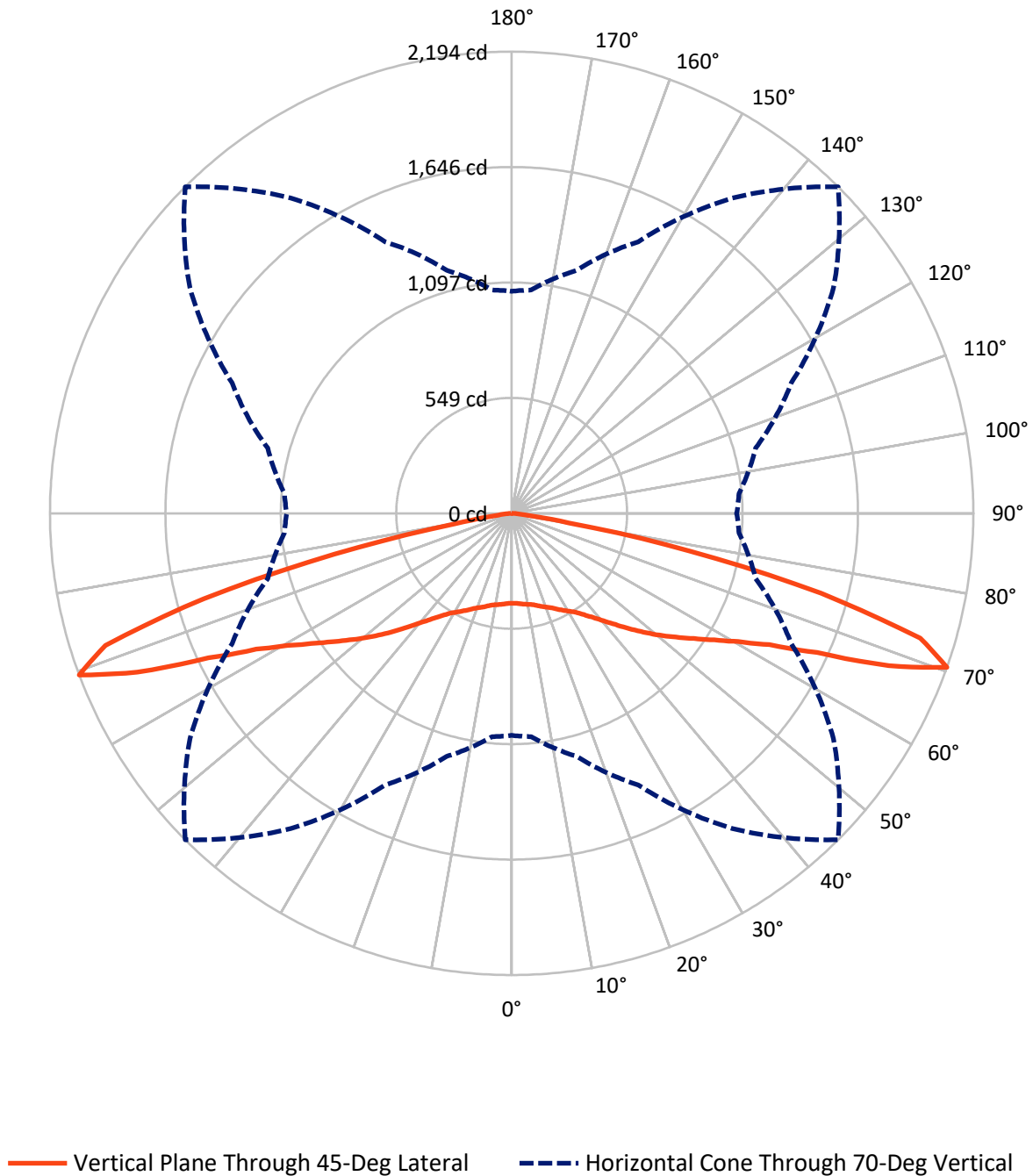


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## Luminous Intensity Polar Plot



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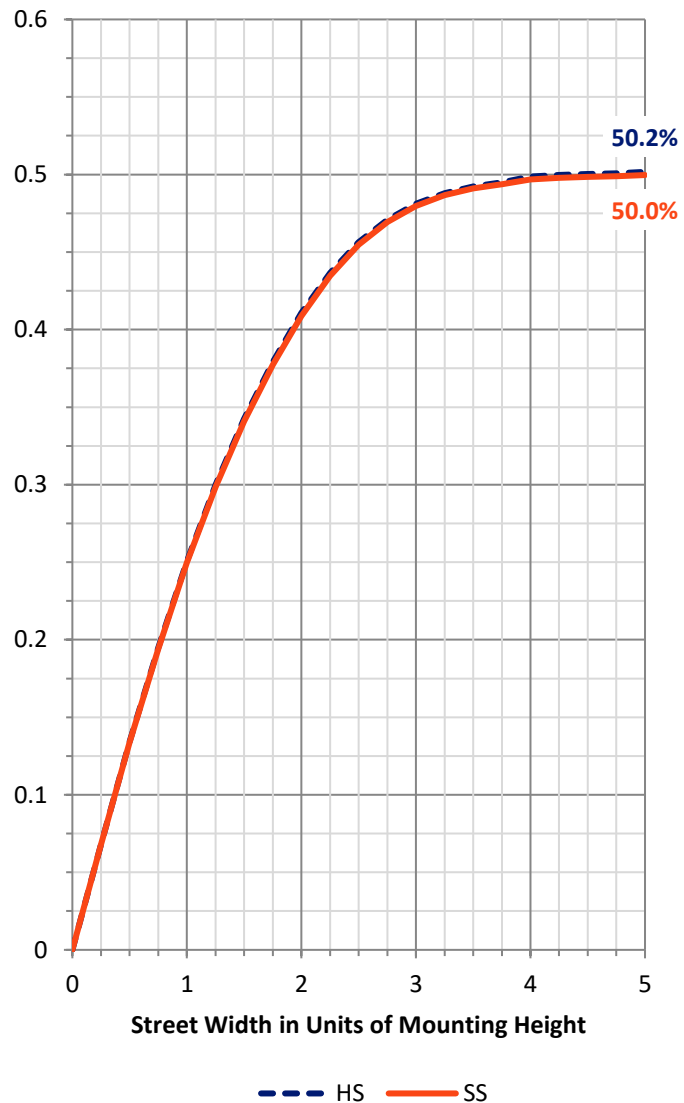
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2234.0   | 0.0    | 2234.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2234.0   | 0.0    | 2234.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 4467.9   | 0.0    | 4467.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 41.6   | 0.9       |
| 10°-20°   | 128.9  | 2.9       |
| 20°-30°   | 230.4  | 5.2       |
| 30°-40°   | 373.5  | 8.4       |
| 40°-50°   | 608.4  | 13.6      |
| 50°-60°   | 927.6  | 20.8      |
| 60°-70°   | 1379.9 | 30.9      |
| 70°-80°   | 752.1  | 16.8      |
| 80°-90°   | 25.6   | 0.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 4467.9 | 100.0     |
| 0°-180°   | 4467.9 | 100.0     |

**Coefficient of Utilization**



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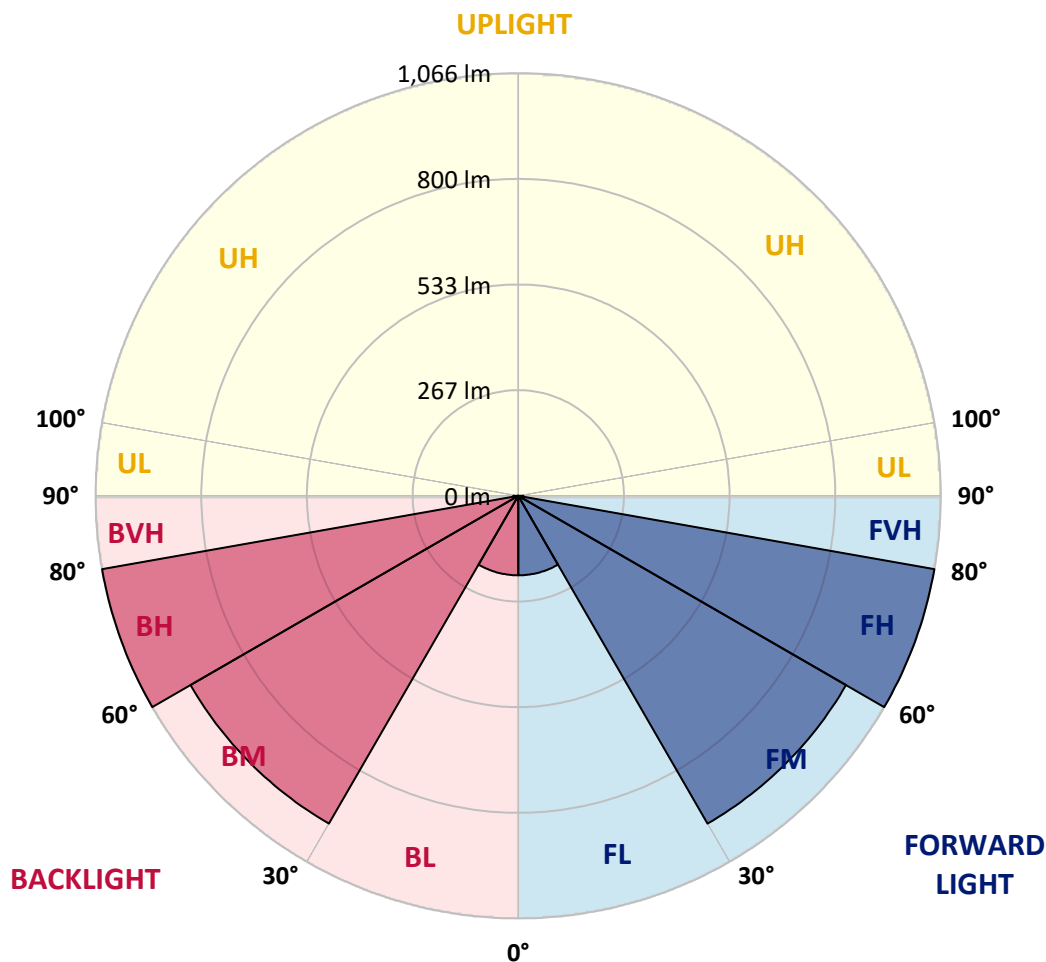
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 200.5  | 4.5       |                         |      |         |
| FM   | (30°-60°)   | 954.7  | 21.4      |                         |      |         |
| FH   | (60°-80°)   | 1066.0 | 23.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 12.8   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 200.5  | 4.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 954.7  | 21.4      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 1066.0 | 23.9      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 12.8   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  | 427.9  |
| 2.5°  | 430.0  | 430.5  | 429.6  | 429.1  | 428.7  | 427.9  | 428.2  | 429.4  | 430.2  | 430.0  | 430.2  |
| 5°    | 433.6  | 434.1  | 433.4  | 433.2  | 432.2  | 432.0  | 432.0  | 433.2  | 433.8  | 433.4  | 433.6  |
| 7.5°  | 437.7  | 438.3  | 437.2  | 437.0  | 436.5  | 436.0  | 435.8  | 437.0  | 437.7  | 437.7  | 437.7  |
| 10°   | 441.5  | 442.1  | 441.3  | 440.5  | 440.1  | 440.1  | 439.6  | 440.5  | 441.7  | 441.5  | 441.5  |
| 12.5° | 445.5  | 446.0  | 445.1  | 444.5  | 444.5  | 445.3  | 444.5  | 445.1  | 446.0  | 445.5  | 445.3  |
| 15°   | 450.4  | 450.6  | 450.4  | 451.1  | 452.2  | 454.5  | 452.4  | 452.0  | 452.4  | 451.3  | 451.3  |
| 17.5° | 457.2  | 457.6  | 458.5  | 460.0  | 461.7  | 465.7  | 462.1  | 460.9  | 460.9  | 458.7  | 458.7  |
| 20°   | 465.5  | 466.1  | 467.5  | 470.2  | 472.2  | 476.0  | 472.4  | 470.8  | 470.2  | 467.2  | 467.2  |
| 22.5° | 474.2  | 475.3  | 477.3  | 480.9  | 484.5  | 488.1  | 484.5  | 481.9  | 479.8  | 476.0  | 475.8  |
| 25°   | 484.3  | 485.6  | 488.8  | 494.6  | 499.6  | 504.7  | 500.4  | 495.1  | 491.0  | 485.6  | 485.4  |
| 27.5° | 498.7  | 500.2  | 504.0  | 511.2  | 517.5  | 521.9  | 517.9  | 511.0  | 505.3  | 498.9  | 498.7  |
| 30°   | 518.9  | 520.4  | 524.9  | 532.5  | 536.8  | 539.7  | 537.0  | 531.7  | 524.9  | 517.5  | 517.5  |
| 32.5° | 544.9  | 546.8  | 551.8  | 558.9  | 559.9  | 560.4  | 559.4  | 556.8  | 551.8  | 542.8  | 543.0  |
| 35°   | 577.8  | 580.0  | 585.7  | 591.5  | 590.6  | 591.5  | 590.2  | 589.3  | 585.7  | 575.3  | 575.3  |
| 37.5° | 618.2  | 620.8  | 626.7  | 631.2  | 628.9  | 627.8  | 628.1  | 628.3  | 626.3  | 614.8  | 614.8  |
| 40°   | 665.1  | 668.7  | 672.9  | 677.6  | 673.8  | 670.5  | 672.7  | 674.6  | 672.7  | 661.0  | 661.0  |
| 42.5° | 713.3  | 718.4  | 722.9  | 729.7  | 726.5  | 722.3  | 725.4  | 727.4  | 723.6  | 711.0  | 712.0  |
| 45°   | 766.9  | 771.8  | 777.7  | 787.8  | 785.6  | 781.0  | 785.6  | 786.0  | 779.5  | 764.6  | 766.3  |
| 47.5° | 822.4  | 827.5  | 836.2  | 849.7  | 848.8  | 843.9  | 849.7  | 846.5  | 838.2  | 820.5  | 819.4  |
| 50°   | 874.8  | 882.0  | 895.4  | 914.3  | 916.0  | 910.0  | 917.9  | 911.8  | 897.9  | 875.8  | 875.2  |
| 52.5° | 924.1  | 931.8  | 953.1  | 978.7  | 985.1  | 977.3  | 987.9  | 977.3  | 956.4  | 927.9  | 925.3  |
| 55°   | 976.0  | 984.5  | 1009.8 | 1043.2 | 1056.3 | 1050.4 | 1060.4 | 1044.4 | 1014.7 | 980.2  | 975.5  |
| 57.5° | 1037.0 | 1042.1 | 1072.5 | 1112.1 | 1134.2 | 1135.5 | 1139.9 | 1113.0 | 1077.2 | 1037.9 | 1032.5 |
| 60°   | 1103.2 | 1110.4 | 1143.3 | 1190.8 | 1225.6 | 1236.9 | 1232.2 | 1192.2 | 1150.5 | 1105.4 | 1098.2 |
| 62.5° | 1188.0 | 1195.8 | 1235.3 | 1292.2 | 1347.3 | 1375.0 | 1356.6 | 1298.8 | 1247.2 | 1193.1 | 1183.7 |
| 65°   | 1258.2 | 1266.9 | 1338.2 | 1439.8 | 1539.9 | 1595.7 | 1549.5 | 1443.0 | 1350.1 | 1273.9 | 1261.3 |
| 67.5° | 1207.2 | 1218.0 | 1329.9 | 1516.6 | 1765.4 | 1932.0 | 1773.9 | 1539.4 | 1357.5 | 1254.1 | 1238.6 |
| 70°   | 1055.1 | 1065.3 | 1195.8 | 1423.9 | 1828.8 | 2194.0 | 1866.9 | 1465.9 | 1200.1 | 1084.3 | 1068.9 |
| 72.5° | 700.5  | 733.1  | 865.2  | 1138.9 | 1633.0 | 2030.2 | 1649.1 | 1115.7 | 802.6  | 698.9  | 676.3  |
| 75°   | 232.4  | 258.4  | 348.6  | 590.4  | 1093.8 | 1518.3 | 1041.3 | 522.4  | 276.1  | 198.7  | 188.0  |
| 77.5° | 58.5   | 67.5   | 93.1   | 168.9  | 436.2  | 864.5  | 392.8  | 138.0  | 75.1   | 52.5   | 46.8   |
| 80°   | 28.5   | 31.4   | 44.9   | 56.3   | 109.3  | 274.8  | 102.5  | 52.9   | 35.5   | 27.4   | 25.1   |
| 82.5° | 15.7   | 15.9   | 25.3   | 31.9   | 40.6   | 71.1   | 42.1   | 31.0   | 20.4   | 16.6   | 16.6   |
| 85°   | 9.6    | 9.4    | 13.4   | 17.0   | 17.0   | 25.3   | 20.2   | 17.0   | 11.7   | 10.4   | 10.8   |
| 87.5° | 3.8    | 3.8    | 4.9    | 5.4    | 4.7    | 6.5    | 5.1    | 5.6    | 4.5    | 4.3    | 4.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)